POWERED BY
COLDHEAT™

# FREQUENTLY ASKED QUESTIONS

**Q: Can I melt heat-shrink tubing or engrave wood with my Cold Heat™ Soldering Tool?**

A: No. The soldering tool must make contact with metallic (conductive) materials to generate heat. You cannot melt heat-shrink tubing or engrave wood with this tool.

**Q: I chipped my tip. Will it still work?**

A: Yes, but it may not be as easy to use as when first new. You may remove the tip and *carefully* file the tip back to a symmetrical shape with a nail file. Additional tips may be purchased at any retailer that carries Cold Heat™ products or from www.coldheat.com.

**Q: What are the current, voltage, and power ratings of this tool?**

A: The tool operates with 6 Volts from 4 AA replaceable alkaline batteries (4 x 1.5V). During soldering (with the tip load on), the battery voltage drops to 1.5V – 3.0V, depending on the size of the joint. Operating current intensity varies between 1.25A and 2.75A, depending on the size of the joint. The power rating also depends on size and thermal mass of soldering joint to be performed; A/C equivalent power rating is estimated at 25W to 50W. These figures are only provided as guidelines and may be different for your application.

**Q: What temperatures does the tip reach?**

A: It all depends on the size of the joint. For a small joint, the tip may reach 800ºF in less than one second and may exceed 1,000ºF. We do not recommend applying the tip to a small joint for longer than a few seconds, as the temperature may keep rising. For large joints, the temperature will likely be significantly lower.

**Q: Is there ESD (Electrostatic Discharge) with this tool?**

A: ESD testing is performed on products to check the durability of the circuitry when a static shock is discharged on a conductive item on the cabinet of the product, similar to the static shock one may experience by walking on carpet and touching a doorknob. In testing, the tool withstood 12kV discharges without an interruption soldering operation. However, the LEDs may not continue to function properly.

**Q: What kind of soldering projects is this tool recommended for?**

A: Based on the specifications mentioned above, we recommend this tool for most electrical projects (such as wires 18-24 AWG), small jewelry repair, and larger electronic projects. We do not recommend it for soldering of large metallic components that require a lot of heat transfer or for soldering sensitive electronic components that may be damaged by fast-rising temperatures or high electrical current.

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(cont.)

**Q: What is the spark I see sometimes during soldering?**

A: The spark (arc) is caused by the passing of electrical current from one half of the tip to the other. Although in testing the tool's spark did not damage any electrical or electronic components, we recommend caution when soldering sensitive components. Also, ensure that the tool is not used in flammable or explosive environments.

**Q: How many soldering joints is the tool expected to perform?**

A: In testing, the tool performed up to 1,200 small joints performed in a consecutive manner from a pack high-quality alkaline batteries. This number will vary according to the size of the joints being soldered, the technique and timing of the operation, and other factors.

**Q: Are there other tip shapes available?**

A: Yes. Please visit a Cold Heat™ retailer or www.coldheat.com to purchase replacement tips of various shapes.

**Q: What size solder wire do you recommend for use with this tool?**

A: The Cold Heat™ Soldering Tool will work well with any solder wire of gauges 18 to 24. It performs best with solder of gauges 18 (0.040 inches or 1 mm diameter) to 20 (0.032 inches or 0,8 mm diameter). However, you should determine the solder wire gauge based on the requirements of your project.

**Q: Can the Cold Heat™ Soldering Tool use solder of any composition?**

A: The tool should perform with regular, lead-free, or silver-based solder of adequate gauge.

**Q: Can the tool desolder joints?**

A: Yes, using wick. Place a piece of clean wick over the joint to be desoldered and apply the Cold Heat™ soldering tip to it. Because of the conductive nature of the wick, the tip create heat and transfer it into the wick in a few seconds or more, depending on the size of the joint. When it appears that the soldering joint melted under the wick, remove the wick from it. If operated properly, the solder from the joint should have transferred to the wick.

**Q: Where can I get more information about the Cold Heat™ Soldering Tool and other Cold Heat™ products?**

A: Please refer to the Instruction Manual that was included with your product or visit www.coldheat.com. You may also email techsupport@coldheat.com or call 1.800.371.2643.